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OUTLINES

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TO

**ESTABLISH A PLAN** 

FOR A

JUST AND REGULAR EQUIVALENT FOR THE LABOUR AND SUPPORT OF THE

P 0 0 R;

AND

TO RECONCILE THE WEIGHTS OF THE KINGDOM TO ONE STANDARD, BY CONNECTING THEM WITH THE COPPER COINAGE.

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## ADVERTISEMENT.

THE subjects herein discussed, apply to the business or the bosom of every member of the community. They have been respectfully submitted to that department of government, whose sanction would have given them a title to the consideration of the legislature; which, in other times, the writer slatters himself they might have been honoured with, but at this juncture they can only obtain from the support of public approbation.

Although it cannot be expected, that government in a crisis like the present, shall apply the same attention as in times of prosound tranquility, to subjects of internal regulation however pressing and important: yet, as a Bill is now pending in parliament, which professes to remedy

"orderly state of the poor:" and, as a most respectable member of the House of Commons (Mr. Powis) has given notice of a motion, having for its object the better regulation of Weights and Measures: and, moreover, as a new and probably a considerable coinage is under contemplation—the writer of these outlines conceives himself justified in soliciting the public attention to his ideas on these essential objects.

When he considers the nature of these discussions, the variety of topics they involve, and the pains which great and skilful men have bestowed upon them—when he recollects, that an able and zealous Committee of the House of Commons, after devoting two session of an enquiry into only one branch of it, that which relates to weights, were unable to suggest any plan which was deemed by the House to be practicable and expedient, he cannot but entertain the utmost dissidence as to the success of this attempt.

The existing system of weights, bad as it is, and varying in different parts of this island, has hitherto been considered as having taken such possession of the minds of the people, who are perhaps but the more attached to it for its very faults, that the legislature have never yet ventured on a radical change.

If, however, such discouragements were to deter every speculative mind from pursuing the bent of its reslections, no improvement whatever could take place in any branch of science or government. Many of the suggestions now made, have been thought by those who have savoured the writer with a perusal of themto be both new and useful, and such as may fairly entitle them to consideration at least, if not to a trial: on these grounds he ventures to lay them before the public.

It is but justice to the worthy and indefatigable author of the Treatise on the Police of the Metropolis, to apprise the reader of these hints, that if they have

have any merit, it has been borrowed from the materials of that elaborate and most useful publication.

London, the 18th March, 1797.

### POSTSCRIPT.

AFTER most of this impression had been worked off, the Writer was informed, that one great objection to the revival of the old Merchant's pound of sisteen ounces, was its subdivisions not running in even numbers to a unit. The same inconvenience has ever existed in the Troy pound of twelve ounces confirmed by the Committee.

The reader, however, is presented with a fifth Table contrasting the new proposed standard, in pounds of 15 and of 16 ounces, with the Troy and Avoirdupoise now in use: and he will there perceive, that the adoption of the latter division would entirely destroy the connection between the new weights and Copper Coinage, one of the great objects of this publication.

# OUTLINE OF A PLAN, &c.

THE intentions of the writer of these sheets, as stated in the title page, are briefly to suggest an equitable equivalent for the labour of the poor employed in agriculture, which at all periods and in all seafons of plenty and scarcity, shall afford the peasant a comfortable subsistence in return for his weekly toil; and, in addition, hold out to him as a reward for perseverance in habits of industry, some greater relief than either the existing statutes or the Bill lately brought into Parliament profess to bestow.

Secondly. To relieve the Poor in general and the public at large, by the suppression of false weights and base coin.

Thirdly.

Thirdly. To establish one general standard for the weights—" an object which the " legislature has for ages endeavoured to " essect throughout the kingdom "."

Lastly. To obtain a revenue, or at least a saving to government of the expence of a new silver and copper coinage.

The reader must not expect a sull discussion or laboured examination of these topics. Neither the professional avocations of the writer, nor his abilities admit of his entering on so large a field. He presumes only to exhibit some new points; or rather to suggest a new application of known principles, to subjects of great importance: leaving the questions of their expedience and practicability to be determined by government and the legislature.

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<sup>\*</sup> Time uncertain; but that the establishment of one was very ancient, and made by consent of the whole realm in the reign of some king, progenitor of Henry III. appears by the exemplification 51 H. 3, which says so expressly." See Report of the Committee of the House of Commons 1758.

### PART THE FIRST.

CURSORY REMARKS AND SUGGESTIONS
RESPECTING THE AMENDED BILL, FOR
THE BETTER SUPPORT AND MAINTENANCE OF THE POOR.

The leading feature of this Bill, appears to be nothing more than a laudable attempt to confolidate and improve the old fystem of work-houses, and houses of industry, under the name of schools of industry; and to employ the labour and time of the younger poor, in acquiring knowledge of manufactures (within doors) under public hired superintendents, which it is obvious would be sooner learnt under the care of vigilant, interested masters, employing apprentices and capitals on their own account.

The experience of a century has shewn that little personal attention has been ever fixed at least for any length of time, to the management of poor-houses, by those whom duty and interest ought to have attached to the care of them. These buildings have long, with very sew exceptions, been the mere receptacles of wretchedness, silth, and disease. Dread of contagion has

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ever

ever operated against visiting them. Benevolence and public spirit have indeed
occasionally stimulated some sew individuals to make the better accommodation
of their unfortunate inhabitants an object
of temporary, personal care; and so long
as that was applied, abuses were checked
or suspended. Their zeal, however, has
had but very transient effect, because it
has seldom been long lived.

The most sanguine well-wishers to this new plan, will therefore be unable to form much expectation of its success, though brought forward under such high authority. It appears to be little more than new modifying regulations which have already been tried, and found ineffectual—offering palliatives rather than remedies for a great and encreasing evil, which it is in vain longer to disguise, because it calls imperiously for an immediate and radical cure.

The real cause of the "distress, depravity, and disorderly state of the poor" employed in agriculture (admitted in the preamble of this Bill) is no other than this ";

See Rept. H. C. 1758--- for the remedy proposed,---one regular standard for weights and measures.

that their daily labour, at the medium price paid for it throughout the year for some years past, has been far inadequate to produce daily bread for a man with a moderate samily: while that of the manufacturing poor, at times is greatly overpaid; that is, so long as the people who employ them have demand for their respective commodities; and, on failure of markets, these workmen are thrown with their samilies on the parish.

The middle class of the labouring poor, porters, draymen, carmen &c. being mostly employed in large towns, have contrived to raise the price of their labour, in, or nearly proportionate to the highest price of provisions: and, never lowering it as they grow cheaper, these people are the most comfortably situated of the three; although in times of extreme scarcity like the winter 1795, even they have been reduced to distress for want of some such remedy as that which is here suggested.

The principal object of this Bill, appears to be the relief of the poor employed in agriculture. Their case is stated above. The following suggestions, it is hoped,

may contribute towards affording them considerable redress.

Admit that the family which a man of this class ought to support by his labour, shall consist of four persons, himself, his wife and two children.

Assume, that so many bushels of wheat will purchase for this samily a weekly maintenance, that is, of bread and other wholesome sood proper for people in their station, with some small surplus for cloaths and other necessaries. And let the father of this samily have an optional claim on his employer, either for that quantity of grain, or for its value in money, in lieu of every six days labour.

This is no new criterion of the value of labour, though possibly the only true one. It is the nearest to an equivalent:—it is that which established corn rents and compositions for tythe: it is in fact, the principle which has always governed hired labour in civilized society, though circumstances have changed the actual value of the one, while power has fixed that of the other. Much to their ho-

nour, the coal-merchants of London adopted this equitable rule\* towards their carmen and other fervants during the late scarcity of bread. It is the same principle which governs the affize of bread all over the kingdom; namely, the relative value of the manufactured and the raw material. The same proportion, observed between provisions, of which wheat is the staple, and labour, would remove the calamity now under contemplation; and which frequently preffes fo hard on those who form the lower orders of the community, merely because the money-price of labour has not fluctuated from year to year with the money-price of corn.

According to Dr. Smith, "it has been accommodated, not to the tem"porary or occasional, but to the aver"age or ordinary price of that necessary
"of life." We must however be excused if we hazard a doubt of this circumstance; when we find him acknowledge, that the occasional price of corn, that is, the mo-

<sup>\*</sup> Nine-pence was fixed on for the quartern loaf, and all exceedings made good by the following rule. The man was allowed three loaves per week, his wife two, and each child one:

ney-price, may frequently be double one year to what it has been the year before. Calamitous experience has recently taught us this truth. How then can we admit this to be any accommodation? The labourer's wants are immediate! his family must be fed by his daily toil; he is unable to subfift on this established average. If fix day's labour produce two bushels of corn, for example, when it fells for 4s. 6d. the bushel, and that quantity is necessary for their maintenance, how are they accommodated when it rifes to nine shillings? May it not be doubted, whether 6s. od. the medium of these prices, would be equally advantageous to this man with the parallel we now propose?

"Every thing," this celebrated author confesses, "is purchased by labour: the first price, the original purchase-money paid for every thing.—Equal quantities of labour will at distant times be purchased fed more equally with equal quantities of corn, the subsistence of the labourer, than with equal quantities of gold and filver, or perhaps of any other commodity.—Equal quantities of corn, therefore, will at distant times, be more near-

" ly of the same real value, or enable the

" possessor to purchase or command more

" nearly the same quantity of the labour

" of other people."

Here then we have produced both aragument and practice in our favour. In Dr. Smith's opinion this parallel will not always hold, but it is sufficient that we have such authority for its going so far:—the practical instance before us of the coal-merchants surely encourages farther experiment.

The framers of the new Bill themfelves admit that relief is necessary to a labourer having more than two children unable to work, and they accordingly provide a fixed fum payable in money from the poors rates. A glance over the returns of the corn-market will fufficiently demonstrate this to be an unequal distribution: since at no one given period does wheat obtain the fame price univerfally in all parts of the kingdom. The fupply will appear still more fluctuating in value, if we take into view the great difference in the average price of wheat between one period and another .-From these premises the conclusion is obvious, that what specific sum, would at one time

time and in one place be adequate, will at others be superabundant, and must frequently fall short of bare support to the labourer and his family. Nothing but a scale of proportion which shall at all times maintain its parallel, or nearly so, between labour and provisions, can ever effectually meet the benevolent objects of the Bill. The public will judge whether that here suggested be not the best hitherto provided.

If the average market price of wheat, fettled by the magistrate's returns under the late act, at every principal town in England and Wales, and the price of oats in Scotland, were respectively ordained, as regulating the wages of daily or weekly labourers in husbandry and similar occupations, for the vicinity of each market town; no man capable of work would thenceforth have any just claim to parish relief, unless his family exceeded the number above-mentioned: and, in proportion to its encrease beyond four persons, an adequate relief might be applied on the principles laid down in this bill.

No farmer or employer of field-workmen could reasonably complain when the price price rose upon him; because, in proportion to the labourer's additional claim, the master would have received an encreased rate, on the product of the past labour employed in sowing and reaping the harvest which enabled him to make the payment; and, vice versa: the workmen on the other hand, would be secured in the same competence in times of plenty or scarcity, from the full employment of his time in honest toil. The prosligate and the idle, would alone deservedly suffer, without pity, or plea for assistance.

This scale of comparison between provisions and labour, may be expected to give comfort to the cottager and his family of four, while in health, without any call whatever on the poors rate; and the better enable that fund, to afford liberal assistance to the sick, and to those whose family exceed that number.

The quantum of relief, when the hufband is unable to work, will be found in the value of his weekly labour, already established.

That of the children under a certain age, may be stated at so much corn per C 2 head,

head, diminishing according to their future earnings.

All other ordinary cases will be easily adjusted, when the principle itself is once established: the parish officer, under controul of the magistrate, must be left to adjust others according to circumstances.

It may well deferve consideration, how far above actual necessity, this regulation of the value of labor should be carried; and whether it would not prove economical as well as liberal, to err rather on that side, than on the other; especially, if by any subsidiary measure, the peasant can be enticed to lay by something weekly, and apply it to subscription in some productive sund, against age and insirmity. It is surmised that this may also be done on the principle of the bill now pending in Parliament.

The too common reasoning of the lower classes in this kingdom, in excuse for idleness and extravagance, is this—" The parish must maintain me when I am old or disabled, and my family when I am sick, or in my grave. NO EFFORT OF MINE

WHICH IS MISERABLE, AND THEREFORE I WILL NOT STRUGGLE IN VAIN."—And, though the workhouse is indeed a wretched retreat, yet too many abandon themselves and their offspring to it as a last resource.

Thus, it appears, the poor at present have no chance of bettering their circumstances, or of acquiring even the lowest degree of happiness. But, "hold out to "the peasant a prospect of obtaining possible fession of the comforts and conveniences of life—convince him that industry, so briety, and frugality can produce and multiply them for his use; and his propensities will be found similar to those of mankind in general: for the wants of all men encrease in proportion to their means, and every new enjoyment is the parent of a new desire."—

It is on this novel, and chearing profpect that the foundation may be laid, of giving a new spring to the industry, and improving the morals of the labouring poor—it may be accomplished in the manner following. Let strict official attention be paid to the good management and security of the funds subscribed by every class of the common people, whether to a common box—friendly association—or parochial fund; so as to give a just considence in their stability.

Enact, that proper trustees be chosen from among the respectable inhabitants, as well to receive and distribute, as to render productive the money paid in. Allow it to be placed in government securities, without any charge whatever to the parties, of stamps, transfers, postage, or carriage.

Let the broker employed in redeeming the national debt, be paid by government for transacting the business of these societies, subject to the same controul as in his purchases for the state. Such evidence of direct attention and encouragement to industry, would have a manifest tendency to secure the affections of the poor to their rulers; and render abortive the designs of seditious, discontented people, who have employed themselves in sowing disorder and insubordination among them.

them. Their pretence itself, the oppressions of the rich, must vanish, because every industrious labourer under the first regulation, would be able to save a trisle for this purpose; and whenever sickness or calamity put it out of his power to subscribe, the parish officers would find it their interest, if they should not be legally obliged to make it good.

Few, it is to be hoped, of those poor who were able, would ever neglect fuch an act of manifest prudence: more especially, if this further encouragement were held out, that the relief or benefit thus obtained to themselves and families, should be exclusively their own; OVER AND ABOVE the established rate of assistance which the new act would entitle them to demand from the parish, in cases of sickness or defalcation from the usual earnings of the family. For example, a family of four, having earned when healthy, fay, eighteen shillings a week, or three bushels of wheat; when deprived of this support, shall be entitled by law to en equivalent from the parish, ALTHOUGH AS A SUBSCRIBER OF TEN YEARS STANDING TO THE PARO-CHIAL FUND, IT BE IN THE RECEIPT OF

THE SAME, OR EVEN GREATER RELIEF FROM THE TRUSTEES OF THAT INSTITU-TION.

Hence the poor would find a fource of comfort in adversity—of reward for toil and ceconomy—instead of distress, misery, and sorrow! and this, without any additional expence to the parish. The parent might even reslect in his sick bed on the possibility of bettering his condition, by saving something out of this double allowance, if it be not totally absorded by the expences of medicines and attendance, both which the parish should provide him.

Perhaps it may be said, that this order of the people should never be raised above the absolute necessity of constant hard labour\*—that these suggestions, if adopted, might possibly tend to raise the price of labour, both mechanic and agricultural throughout the kingdom, and of consequence enhance the price of provisions and manufactures.

This has been the cry for years past;

<sup>\*</sup> Nor would he, for all the comforts promifed him by this regulation, depend on unremitted industry and rigid occonomy of his time and substance.

and, while acted on, the mischiefs now so feverely felt, have been accumulating in the country. On the contrary; may it not be fairly pleaded, that an opposite line of conduct, not carried farther than religion and humanity dictate, may have the defired effect. At any rate, it is clear, that the fystem of grinding down the poor to the extreme of misery, has neither kept down the poors rates, nor the price of provifions-The former have increased beyond the amount of the land tax; and the latter nearly doubled in the memory of man, fo as now to be hardly attainable by the middle classes, who are daily losing some of their accustomed enjoyments; while the poor of all descriptions, are growing more depraved and disorderly every day; discontented at their condition, and harraffed by expensive and eternal litigations of their immediate superiors, about the quantum of relief, or the place of their legal fettlement.

Another alarming and encroaching evil attends the present administration of relief to the poor; at least this was the case in 1792, and the winter of 1796—THEY DO NOT ASK, BUT DEMAND IT—in terms of

MENACE, NOT RESPECTFUL APPLICATION—and, it is too melancholy a truth, FREQUENTLY IN A TONE, WHICH ADMITS NOT OF DENIAL.

It is furmised, that half the sum now levied throughout the kingdom on account of the poor, might in a sew years be saved, under regulations similar to what are here thrown out; which must be considered as mere hints, rather than digested ideas, and requiring much consideration.

A few subsidiary regulations would be necessary to complete a new code of poor laws on the principles here assumed; which might enable the legislature to repeal those existing statutes\* which have only tended to perpetuate the most irksome of all litigation—contests about settlements, embarrassing the magistrate, and distracting the country.

That something prompt and decisive is necessary, the fact above stated proves to demonstration; that fact is the natural consequence of what has been shown to be

<sup>\*</sup> See reports, H. C. on weights and measures 1758 and 1759—" multiplicity of statutes encreased the abuses."

THE RADICAL CAUSE OF THE "DISTRESS, DEPRAVITY, AND DISORDERLY STATE OF THE POOR"—namely, that the PRICE OF DAILY LABOUR DOES NOT NOW PRODUCE DAILY BREAD. DAILY BREAD MUST BE HAD OR LABOUR CEASES, WHICH CANNOT HAPPEN WITHOUT A CONVULSION IN THE STATE. TO AVERT WHICH CALAMITY THE DIFFERENCE HAS BEEN PAID BY THE PARISH.

To avert that otherwise inevitable evilin suture, the price of labour, it is acknowledged on all sides, must be considerably raised. On what better scale of proportion than according to that here suggested, the wisdom of Parliament may discover: certainly its members have much better sources of information than the writer of these remarks; but having no where met with the same ideas, he thinks it his duty to offer his own for consideration.

Another great source of relief to the poor, may be expected to arise from the adoption of proper means of reconciling the different weights of these kingdoms, and connecting them with the copper coinage according to the following outline.

#### PART THE SECOND.

CILETHE DIFFERENT WEIGHTS OF THIS KINGDOM TO ONE STANDARD; AND BY CONNECTING THEM WITH A NEW COPPER COINAGE, TO EFFECT THE FOLLOWING NATIONAL BENEFITS.

First. Relief of the poor of Great Britain by the suppression of false weights and base coin.

Secondly. Establishment of one general standard for weights.

Thirdly. Obtaining a revenue, or at least a faving to government of the expence of a new silver and copper coinage.

It can hardly be doubted, that the great quantity of base copper and silver coin now current in Great Britain, has had considerable insluence on the price of all necessaries of life: for, in proportion as the intrinsic and the nominal value of such coin have differed, differed, so have the prices of provisions enhanced upon the public, in which the poor have been particularly aggrieved.

The counterfeiting and issue of base copper and silver coin are now become regular professions\*; and have grown to a magnitude and extent, creating serious alarmand inconvenience. To check which, government have even found it necessary to connive at a breach of the royal prerogative, in the uttering of copper metals at several great manufactories, which already begin to disperse themselves into general circulation.

The mischief of base money is attributed principally on the one hand, to the high price at which real copper money has been issued above that of its actual intrinsic value; and on the other hand, to the dearness and scarcity of silver compared with gold, and the loss (and apprehended inconvenience to our India trade) which would accrue from a new and general recoinage of silver money of the present standard.

<sup>\*</sup> Colquhoun's Police.

The following fuggestions are submitted in the hope of annihilating the first of these abuses, by removing the strong temptation which has been found to exist, from the profit of uttering even full weight counterseit half-pence at their present nominal value. which is proposed to be done, by issuing true money at such a rate, compared with the market price of the metal, as shall appear barely to cover the expence of manufacture to government; who certainly ought to fabricate cheaper, and to buy so much lower than individual needy felons, that no profit will hereaster accrue to them, from their illegal occupation.

It is also proposed to combine with the new copper coinage, a regulation of the standard weights of the kingdom; in such a manner, that no other weights shall be made use of, and at such a price to the employer of these weights, which are also intended to be coined; that a profit shall arise on the latter, for the pur-

<sup>\*</sup> The present price of British copper coin, is 23d. per lb. avoirdupoise. That here recommended would be uttered at 12d. the troy pound.

<sup>†</sup> See Rep. H. Com. 1758 and 1759.

<sup>1</sup> At least to a certain fize.

pose, and levied expressly on the plea of defraying the loss and expence expected from a silver coinage.

This reduction in the comparative value of copper to filver, will necessarily increase the number or the size of the copper coin, from which no trifling benefit is expected to be derived by the poor: fince it is a well known fact, that the necesfaries of life are uniformly obtained cheapest in those countries, where the numeratry or current medium goes down to the lowest division of value. It is with a view to this object, that the number \* is here preferred to the fizet; in expediation, that when the number is doubled, as well as the intrinsic weight given for a NEW SHIL-LING of THE NEW COIN, this may operate in keeping down, if not reducing still lower the prices of provisions throughout the kingdom.

Another public advantage will accrue from this part of the plan—faving in a great degree, the loss of individuals holding the old, when the new coin shall appear, and thereby rendering this important measure

<sup>\*</sup> As in Table No. 1. † Ditto No. 2.

which must be attended with some detriment to them, as palatable and popular as it is become necessary. For by issuing forty-eight of the new half-pence \* (for a new shilling) of the same circumference and nearly equal weight to the old diminished real, and the light counterfeit currency, both of these may be gradually instead of abruptly withdrawn. Government must be content to take in the old coin at its former value (in payment for the new weights); and then the latter only, which will foon find its way to the brass-founders, will occasion loss to the possessors, precisely in the difference between the price of the metal, and that at which they received the pieces in payment. This lofs would fall chiefly upon the publick brewers and retailers of liquors, both of whom can well afford to pay it for once, and who will the readier fubmit, when they discover the many future benefits of the new regulations.

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<sup>\*</sup> Though the new coin will weigh but 120 Grains, and the full weight of the old was 152, yet but few of those now in circulation are heavier than the proposed issue; and, therefore as the impressions will be nearly similar and the size alike, it may reasonably be expected, that great part of the old will continue to circulate, after the period expires for taking them in.

Notwithstanding the statutes\* of the 16th Ch. I. and 35th of his present Majesty, have ordained, "that there shall be but one " weight according to the standard of the " Exchequer throughout the realm, in or-" der to prevent pernicious and fraudu-" lent practices, by which the poor in " particular have been much injured;" and, that "nothing + requires the affistance " of the legislature in a greater degree, " then to shield the poor against the nume-" rous cheats who fell provisions and other " articles by means of false weights and " meafures"-Yet nothing effectual has been done to prevent this last of these evils, and there still exist two denominations of weight, namely the troy and I avoirdupoise.

The troy pound is less than the avoirdupoise; but the ounce and dram greater. These differences in our weights have occasioned great consusion, particularly in the

<sup>\*</sup> See the Preamble XXXV. G. III.—See also Great Charter, &c.

<sup>+</sup> Police of the Metropolis, p. 161.

<sup>‡</sup> First mentioned in 24th H. VIII. Rep. 21 Placed in the Exchequer 1582---24th Queen Elizabeth, without an order or statute of Parliament.

See annexed Tables.

practice of distributing medicines\*; the druggests and grocers selling by avoirdupoise, and the apothecaries by troy weight.

This consussion it is also intended to remove, by establishing a new table of standard coined weights: abolishing entirely the avoirdupoise ounce, and adopting a single renovation, as to the number of ounces to the pound: instead of sixteen ounces as in the avoirdupoise, or twelve as in the troy pound—fifteen ounces are here recommended for general use.

These it will be seen, are troy ounces ‡ of 480 grains each, in preserence to those of 437 and a fraction, the avoirdupoise weight.

The new divisions of these ounces are to be composed of the actual copper coin §

\* Ency Brit. act Pharmacy, 297.

† The pound weight in Ed. I. confisted of 15 oz. troy--fee Rep. H. C. 1758, p. 17; where it is highly recommended.
Some innovations must be made to put things again on a right
footing.

‡ Standard pound or troy 12 oz. Merchant's pound 15 oz. fee Rep. p. 20.

§ The dram or farthing will contain 60 grains or 3 scruples.

and

and no other: and being also fractions of the troy, the proportions of all medical prescriptions will continue undisturbed, and the dealers in money who buy and sell by troy will still have the same weight and rule of proportion as heretofore. While the poor, who have long severely suffered by fraudulent and short retail weights, will be protected by the stamp against such deceit for the suture: while they are bettered about ten per cent. in the ounce and below it, and almost three per cent. in the pound weight, beyond that by which they have been accustomed to make their purchases of the necessaries of life.

Nothing can exhibit in a stronger light the superior advantages over former systems which this plan would afford, than by contrasting it with the † table of proportions between the troy and avoirdupoise (the present merchant's weights) as laid before the House of Commons in 1759, and those which the adoption of the new table would produce.

<sup>\*</sup> The smaller money weights stampt pursuant to the act of will also continue in use.

t No. 3 Appendix.

Instead of decimal parts of grains diminishing and adding, if troy is to be turned into avoirdupoise, or avoirdupoise into troy; the new proportion of 12 to 15 requires merely the addition of one-sourth, or substraction of a fifth, to change the troy into the merchant's pound, or the merchant's into troy—an easier combination cannot be conceived.

In collecting the public revenues no difficulty would occur; three per cent. added to the duty on all commodities fold by weight would cover all the difference, rather in favor of government.

In mercantile transactions the change would instantly be taken into consideration and vary the price accordingly.

In common intercourse the poor would have a remedy against frauds in THEIR OWN HANDS, and a positive advantage in the increased weight of the pound and its subdivisions.

This coin in its subdivisions would run into all the combinations of the two weights without fractions; for instance,

the penny in table No. 2 weighs a troy ounce—a penny farthing would weigh the merchant's ounce. A shilling in new copper coin the troy pound—a shilling and three pence the merchant's pound and so forth.

The price of copper is now high, that is to common purchafers: but the quantity required by government for this purpose would be very considerable indeed; and the commodity being in the hands of a sew opulent individuals who can produce it at their pleasure; it is presumed, that government may obtain its supply (by a discreet bargain) so cheap, and so much below the general market-price, as to reserve some profit even upon the money \*, and yet iffue it at half the present value, thereby effectually deseating suture counterseits, and obviating all popular objection to the measure.

As the larger weights in proportion to their respective magnitude, will be coined at a cheaper rate than the money which is to compose the small ones, a very considerable revenue may be derived from this source, in aid of the silver coinage, which

<sup>\*</sup> Or else a duty on smelting and importation will be tantamount.

if possible, should appear with the copper. And this profit, if not annual \*, should be repeated every three or five years, according to the term which these weights alone are allowed by Parliament, to remain for use in the hands of the dealer.

In this attempt to reform the abuses of old fystems, it is not meant to assume, that any other plans so perfect can be substituted in their place, as to lay open to no objection, or be attended with no inconvenience on the change; nor, that hereafter their practice will not generate other abuse.

It may be acceptable, however, to anticipate some of the probable objections against what are here proposed as to the weights and copper coinage. For, respecting the equivalent for labour, it is presumed after the authority quoted, there can be but one opinion.

Money, we find by Dr. Smith, is not at distant times of the same comparative value with labour; equal quantities of the one, will not pay for equal quantities of

<sup>\*</sup> Report H. C. 1758.

the other. But corn, the fubfishence of the labourer, will "nearly" if not always do fo. If corn, then, will supercede, and even change places with money, and act as the medium between money itself, and labour, what better standard can be fixed on? The furplus of corn earned by the husbandman beyond the confumption of his family, will purchace the other articles necessary for their support; and if the proportion established be an equitable one, he will always have a furplus-But, pay him in the fame fum of money from year to year, from fourteen only to his grand climacteric, which has been the case, and the older he grows, and the larger his family, the fmaller fubfiftence he draws from his toil-he will find it nine times in ten, inadequate to purchace bread alone, and be inforced to an undefined and perpetual call on the parish.

Many objections will probably be raifed to these arrangeme is for the weights and coinage.

That, respecting the disposal of the light money, has been already answered; it may be taken in payment for the

new weights by government; and be fuffered to circulate for a limited time, in exchange for old gold and filver. As the new copper disperses, the old will become undervalued or disused.

It has been thought, that a fine coin would be very expensive, and a coarse one liable to counterfeit. All danger of the latter is removed, by the proposed reduction in the price of coined copper—An allowance is endeavoured to be made for the expence of a neat coin, which being manufactured in large quantity, may be cheaply as well as perfectly executed.

Some doubts may be entertained, whether the smaller pieces can be uttered so much alike in gravity, as to serve correctly for weights—In this there is little difficulty. The last copper coinage, though delivered to the public by the hundred, was so nearly exact in weight, as barely to pay the porterage to those who issued the money by tale—the same attention will produce them sufficiently correct for all the purposes of common exchange.

" Is not copper so soft a metal as to be liable to suffer greatly by friction, and thus

thus become so much lighter from use, as to render purchases by it deceptive?

This is in part true: and to remedy the evil, it is proposed to coin the halfpence and farthings frequently, and to recal the larger weights, as suggested in the reports, every three years, or oftener if necessary.

It may possibly be said, that the tables exhibit too many coins for circulation. Two sorts only, the farthings and half-pence, would circulate as money, and be declared legal tender—the others need pass only as medals, and be established as the legal weights of the kingdom.

If the beauty and cheapness of the coin induce exportation, instead of checking, every encouragement should be given to it, not only as to the vend of a natural, but of a manufactured production of this country; and this may probably happen to no inconsiderable extent; for a very ugly coin is exported in great quantities from Sweden. This probability moreover, affords an additional argument for uttering the new small coin below the present

present price, and as near the general market price of the metal, as will cover the charge of manufacture—Government's profit will depend on the abatement obtained from the proprietors of the mines which produce it.

The scale-makers will certainly have a just plea to be considered, if government determine to take the manufacture of weights out of their hands; and perhaps the most equitable mode of redress, may be to divide the profit, giving these tradesmen the sale and issue of all the larger weights at a proper allowance for retailing. The fmaller money-weights are already liable to a stamp fee, which is collected by an officer of government; and, being merely fubdivisions of the copper money, they also should be coined at the mint, and delivered out with some allowance to the scale-maker for dispersing them.

Will not this proposed change of the merchant's weights create confusion? No—prevent it. In support of this affertion, the reader is referred to the Report of the House of Commons, for the answers on this

this head given by the officers of the Customs and the Excise, and to the table of comparison laid before the House. The fractions in that table are infinite—Whereas a sourth, added to the troy, or a sisth deducted from the new standard as we have already stated, would give every calculation required.

This regulation will facilitate the exchanges with other parts of Europe—for it is well known that the troyes pound has been the coin of every other standard—abuse merely and want of attention in the different governments have occasioned the variations which we now find in different countries.

The payment for fets of copper weights will prove a heavy tax on the tradesman.

Against this it has already been urged, that the plea of levying it, is in order to indemnify government for the expected heavy loss upon a new coinage of silver, a measure not less necessary, than difficult and expensive. And further, that the regulation of weights is become

<sup>\*</sup> Vide table No. 3.

equally expedient. The following table, taken from the report of 1759, shews the cost of the weights now in use, and how far the Committee intended to encrease the charge.

The half quarter of an hundred	Those made by order of the
weight, then coft - 0 2 6	House 0 40
The quarter 0 4 0	
The half hundred - 0 7 0	
The hundred weight - 0 14 0	

## Those herein proposed to be coined are

The half quarter of an hundred	weight 0 17	0
The quarter	1 19	. 0
The half hundred -	- 3 10	9 0
The hundred weight -	- 7	0 0

But in diminution of this increased cost it must be allowed, that the metal will always be ready money without diminution; and that all expence of repairing or re-adjusting the old weights, which the Committee report to be considerable, will be saved under the new regulation.

If, however, the legislature consider this as an objection of importance, the compulsion to receive coined copper weights may

may be limited to the merchant's pound, and all beyond it left optional: or, the large ones, stampt and dated. may continue to be made of iron, and remain in use for a time fixed by the new act of parliament.

It has been already observed, that this plan may be expected to operate in lowering the price of provisions, as well as in preventing frauds on delivery of the quantities purchased. It is an ascertained fact, that in countries where the current-coin is brought to the lowest denomination, grain and other necessaries of life are the cheapest. In the East-Indies, where couries pass as money, four of them (a gunda, or 46th part of a penny) will purchase a water melon or a meal of rice. The new half pence in table No. I. of which 48 for a shilling, or the farthings in table No. II. made of the fize and impression and carrying four fifths of the full weight of halfpence of the coinage of 1758, it is conjectured may foon pass as equivalent: at any rate the experiment may be tried without inconvenience.

May not this confideration, we speak with extreme diffidence on this point, conceiving it high matter beyond the scope of our investigation—may it not warrant a change in the filver standard, to assist in covering the charge of coining it asresh? And if so, cannot silver also be made, as in Asia, to serve both for weight and tale, by an addition to the alloy?

It may not be improper here to recapitulate the objects of this plan.

First. The Relief of the Poor, by effectually suppressing false weights and BASE COIN, and issuing a new copper coinage at a lower rate than the present standard, thereby reducing the price of the common necessaries of life, purchased in small quantities.

Secondly. Establishing one general standard-weight throughout the kingdom, which shall be adapted to every purpose; and connecting the copper money and weights under one regulation.

Thirdly. Creating a new fource of revenue, sufficient to defray the mint charges of a new copper and silver coinage.

It appears now necessary, to produce such a table of coins and weights as shall meet the

the purposes above stated, obtruding the least possible interference with the general practice and prejudices of the people—to avoid disturbing more than absolutely necessary, the accepted divisions of the weights in common use—prevent frauds upon the public at the first adoption of the plan by a greater comparative difference in the price of commodities sold by the new, than their proportion to the old weights will warrant\*. Attention must also be paid to the change of proportions created by these regulations, between British and Foreign weights, and to their effect on the public revenues\*.

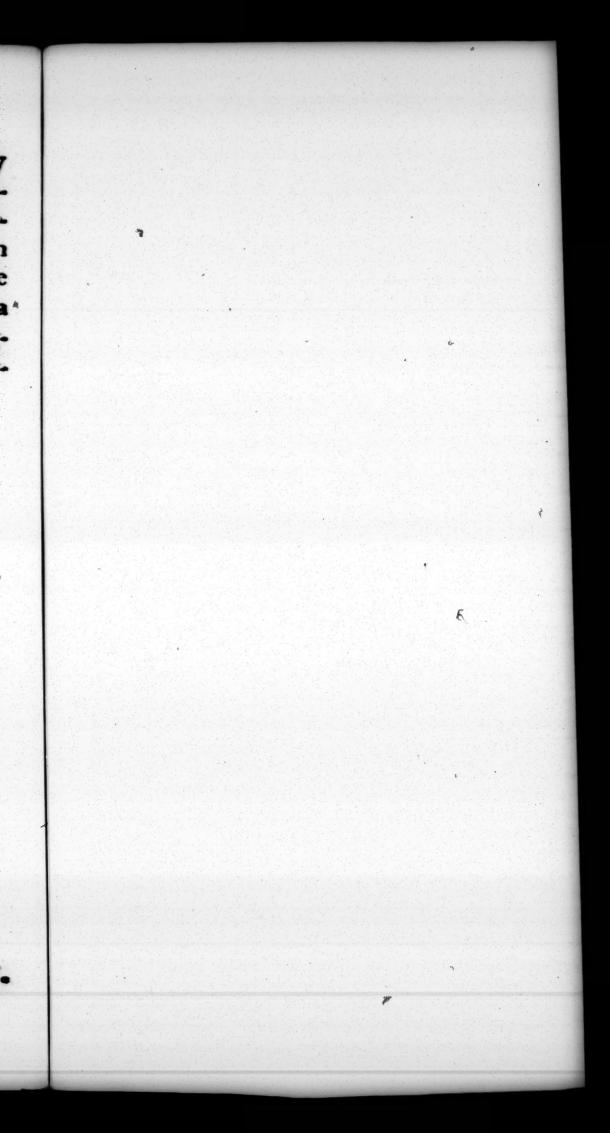
These combined objects have occasioned no small difficulty and embarrassment to the writer of this essay, and have probably hitherto impeded a reform in this branch of internal government.

It would therefore be prefumption in him to think the following Tables will stand in

<sup>\*</sup> This danger applies almost exclusively to the consumer — for the trader will have leisure, and capacity to make accurate calculations: government must therefore take care the magistrate explains it to the people.

<sup>†</sup> See this last point considered by the Com. H. C. 1759 in the Evidence of the officers of Customs.

need of no alteration. But, after so many attempts have been made, it seems assonishing that no greater progress has been hitherto effected; and therefore, as the attention of Parliament is now again attracted to the means of relieving the poor, this seems a proper moment for exhibiting every suggestion which may contribute to that purpose.



# TABLE, No. I.

Comparative Table of the existing and proposed Standard Weights and New Copper Coinage of Great Britain.

	Avo	irdu	poil	e. ´	7	-		Tro	y.			Ne	w	Standar	d W	eig	hts.		1	Nev	v Co	op	per	Coins.	
	Grains.	Drams	Oz	lbs.	2	Cwt.	Grains	Dwts.	Ems.	Oz	lb.	Grains.	1	Dwts.	Drams	Oz	lb.	Cwt.	Ton.	Scale Denomination.		lue.	d.	No. of Half- pence.	No. of Far-
Dram	2747	1	1 5				60	2 1/2	1				60	2,	1	1 8				Dram			1	0	I
Quarter Oz.	10930	4	1				120	5	2			1	20	5	2	1 4				Quarter Oz.		11	1 2	1	2
Half Ounce	218;	8	1 2				240	10	4			2	40	10	4	1/2			P.	HalfOz.			1	2	4
Ounce	437+5	16	1				480	20	8	1		4	80	20	8	1				Ounce			2	4	8
Quarter Pound	1750	256	4									18	00	75	30	34				Quarter lb.			7:	15	30
Half Pound	3500	512	8									36	00	150	60	7:				Half lb.			15	30	60
Pounds	7000	1024	16	1			5760	240	96	12	1		60	240 300						Shill. Weight Pound Weight		1	6	48	96 120
Quarter Cwt.	196,000			28	1							201,6	00	8,400			28	1 4		Quarter Cwt.	1	15		1680	3300
Half Cwt.	392,000			56	2							403,2	00	16,800			56	1 2		Half Cwt.	3	10		3360	6720
Hundred	784,000			112	4	1.						806,4	.00	33,600			112	1		Hundred	7			6720	13,440
Ton	15,680,000					20						16,128,0	00	672,000		1	2240	20	1	Ton	140			134,400	268,800

Two alterations are herein suggested, viz. 15 Ounces to the Merchant's Pound instead of 16 Ounces, and 24 Pence instead of 12 Pence to the Shilling.
By this Table the new Dram and Ounce are equal to the Troy Dram and Ounce, and the Ounce rather more than 10 per cent. better than that of Avoirdupoife.
the new Shilling Weight, or small Pound of 12 Ounces, is also equal to the Troy-Pound.
the new Merchant's Pound Weight of 15 Ounces Troy, as 7200 Gr. or 3 per Cent. better than Avoirdupoife.
the new Hundred of 112 Pounds Weight, as 306400, or 3 per Cent. better than the Great Hundred now in use.
the Halfpenny now current, of 46 to the Pound Avoirdupoife, should weigh 152 Grains: that herein proposed 120 Grains.

# TABLE, No. II.

Comparative View of the Existing and proposed Standard Weights and new Copper Coinage of Great Britain.

	Avoirdu	pois					1	Ггоу	•		New	Standar	d Weig	ghts.			No.	ew (	per	Coins.		
	Grains.	Dms.	Ounces.	lb.	Qt.	Grain	s Dv	wits.	o	z lb.	Grains.	Dwts.	Ounce 9	ib.	Qr.	Ton.	Denomination.		lue. s. d		No. of Hali- pence.	No. of Farthings.
Quarter Oz	109 4	4	:			120		5	2		120	5	1 4				Farthing			1	o	ı
Half Oz.	21875	8	<u>1</u>			240		10	4		240	10	1 2				Halfpenny			1 2	ı	2
Ounce	43715	16	1			480		20	8	1	480	20	1				Penny			1	2	4
Quar. Pound	1750	256	4	1 4		1440		60 2	4	3	1800	75	31				Three-penny			3	6	I 2
Half Pound	3500	512	8	1 2		288		1204	.8	6	3600	150	7 2				Six-penny			6	12	24
Pound	7000	1024	16			576	0	2409	6 1	2 1	5760 7200	240 300				1	Shill. Wght. Mer. Pound		1	3	24 30	48
Quart. Cwt.	196,000		448	28	1						201,600	8400	420	28	1		Mer QrCwt.	1	15		1680	3360
Half Cwt.	392,000		896	56	2		T				403,200	16,800	840	56	2		Mt.HalfCwt	3	10		3360	6720
Hundred	784,000		1792	112	4	1			1		806,400	33,600	1680	112	4	1	Merch. Cwt.	7	7		6720	13440
Ton	15,680,000		35,840	2240	80	20					16,128,000	672,000	33,600	2240	80	20	1 Merch. Ton	140	0		134,400	268,800

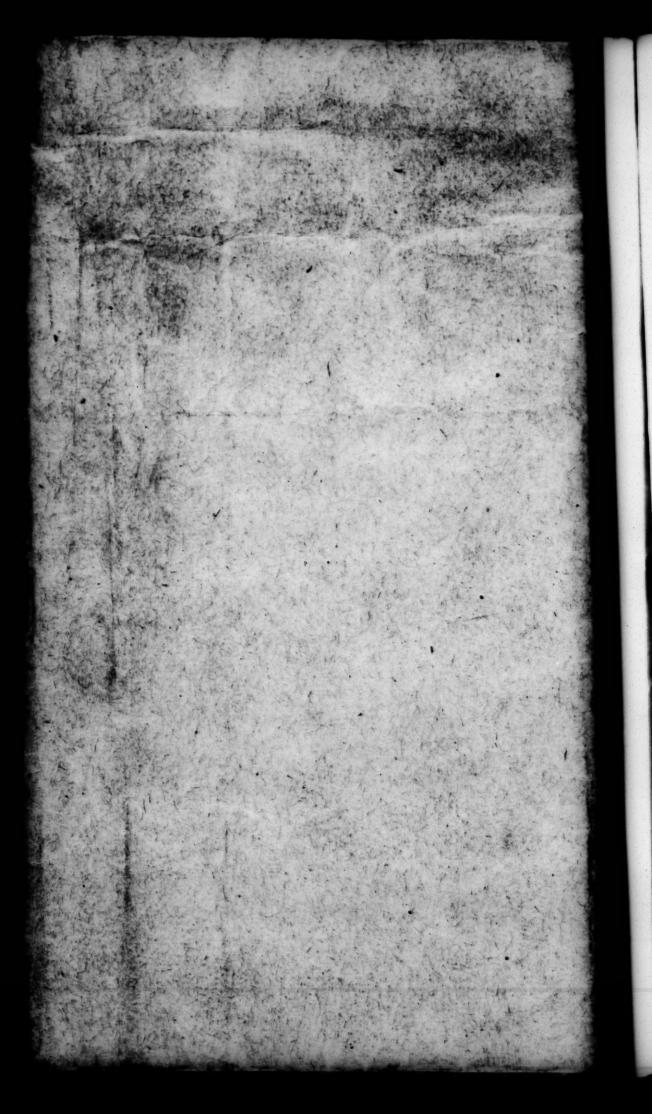
In this Table the Mercha	ant's Pound is taken at 15 Ounces, and the P	Pence, as at present, 12 to the Shilling.	
the Mercha	ant's Ounce is equal to Troy, and fomething r	more than 10 per Cent. better than Avoirdup	oife.
the new Sh	hilling Weight or finall Pound of 12 Ounces i	is still the Troy Pound.	
	ant's Pound, of 15 Ounces Troy, as Gr. 72		
	nant's Hundred of 112 of these Pounds 3064		
	low current should weigh 46 to the lb. Avoird		e, or 240 Grains to the Halfpenny.

# TABLE, No. V.

A Table of Comparison between the Troy and Avoirdupoise, and a proposed new Standard Weight, divided into Pounds of 16 and of 15 Ounces.

		Tro	y.		1	Avo	irduj	poit	ė.			New Std. o	liv. into	16 C	z. 1	in lb		N. Std. of 15	Oz. accord	ding to	o th	e Out	line
	Grains	Dwts.	Dms.	Oz	lb.	Grains.	Drams	Oz	lbs.	Qt	Cwt.	Grains.	Dwts.	Drams	Oz	1Ь.	Cwt.	Grains.	Dwts.	Drams	Oz	lb.	Cwt.
Dram	60	2 1/2	1			27 4 7	-1	1 3				60	21/2	I				60	2 1	1	1 8		
Quarter Oz.	120	5	2			10930	4	1 4				1121	4165	1 525	1.4			120	5	2	+		
Half Ounce	240	10	4			21815	8	1 2				225	924	345	1 2			240	. 10	4	1 2		
Ounce	480	20	8	1		43716	16	I				450	1818	7 2	1			480	20	8	1		
Quarter Pound	1440	60				1750	256	4				1800	75	30	4			1800	75	30	3 <sup>3</sup> +		
Half Pound	2880	120				3500	512	8				3600	150	60	8			3600	150	60	7 2		
Pound	5760	2,40	96	12	I	7000	1024	16	1			7200	300	120	16	1		5760 7200		96 120	12	1	
Quarter Cwt.						196,000			28	1		201600	8,400			28	1 4	201600	8400			28	1 4
Half Cwt.						392,000			56	2		403200	16,800			56	1/2	403200	16800			56	1 2
Hundred						784,000			112	4	1	806,400	33,600			112	1	806400	33600			112	1
Ton			77.7		_	15,680,000					20	16,128,000	672,000			224	20	16128000	672000			2240	20

Note.—The Division of the New Standard into Sixteen Ounces to the Pound, would not only create the Fractions above stated, but entirely prevent the Connection of the Copper Coinage with one or other of the two Weights, the Troy or Merchant's Standard: whereas the Revival of the Old Standard, as recommended by the Committee of the House of Commons, according to Tables No. 1 and 2, would preserve that Connection with both of them.



# REGULATIONS.

SHOULD either of the foregoing tables be approved, the following regulations appear necessary to be established under the fanction of Parliament.

#### WEIGHTS.

That one copper standard \* weight be established, to take place on a day appointed.

That none but fuch coined copper weights as shall be issued by government be used after that period.

That weights so issued, shall only remain in use for a time to be fixed in the act.

 According to the Great Charter and 7th H. VII. when first the King's standards were ordained.

32 Barley Corns weighed a sterling.

20 Sterlings an ounce.

12 Ounces 1lb troy.

See page 12 Rept. H. C. 1758.

" Attempted for ages" ibid p. 16.

G

That

That all such weights be coined at the mint, or under controul of the company of Moneyers, and circulated by the officer appointed to stamp and regulate the small money weights of this kingdom.

That the new weights above a quarter of an ounce, or halfpenny, bear the impression of a Crown, with the date of coinage and denomination of their respective gravity.

Then enumerate them according to the table.

That all dealers by weight shall be bound to provide themselves with one set at the least of these new weights, on or before to be delivered by the Officer nominated under the act, at and after the rate and value of copper money of the new standard, and to be paid for at the option of the dealer, in gold, silver, or copper coin now extant, at its present price.

## COINS.

THAT a new coinage of copper money be forthwith struck—the weight of which shall correspond with the new standard weights of the kingdom, so that any number of the former may serve instead of, or as subdivisions of the latter: or in other words, act at one and the same time as a medium of value and an arbiter of gravity.

That these coins shall consist of and weigh as follows.

Here supply the table No. 1 or 2.

### PENALTIES.

Counterfeits of either copper money or coined weights, rendered by the act liable to all the penalties attached to those of the gold and filver coin of this realm.

Persons using other than the new weights or the money as weights \*, after a certain period, except the money weights already and in suture, stampt by the officer appointed under the act, to be fined in the first instance, and for the second offence declared instance, and condemned to the pillory—for a third to suffer as selons.

Purchasers of commodities in quantity at, or under t five pounds weight, shall be allowed to put the copper money tendered in payments, into the seller's scales as

<sup>\*</sup> Which corresponds with the new table.

<sup>+</sup> Fix this at the greatest amount of legal tender in copper coin.

weights. Refusal of the seller to consent punishable by sine or imprisonment. On the other hand, purchasers tendering light money, coined after these regulations are in sorce, may be dealt out the commodity bought by the weight of their own coin prosered in payment.

The following Extracts from the NEW BRITISH ENCYCLOPEDIA, and from two REPORTS TO THE HOUSE OF COMMONS in the Year 1758, and 1759, suggest further improvements of this plan if its principle should be approved by the legislature, as it would carry still farther the affinity between money and weights which has been found so useful in most parts of Asia.

BRITISH ENCYCLOPEDIA, VOL. XII. P. 1.

" THE regulating the standard of both filver and gold to # fine, and the pound sterling to four ounces standard silver, as it stood in the reign of Queen Mary I. has also its advantages as Mr. HARRIS has obferved. It makes the CROWN PIECE TO WEIGH JUST ONE OUNCE, the shilling four penny-weights, and the penny eight grains. Confequently were the new statute to bear, that the weight of the coin should regulate its currency upon certain occasions, the having the pieces adjusted to certain aliquot parts of weight would make weighing eafy, and accustom the common people to judge of the value of money by its weight, and not by the stamp."

"In that case there might be a conveniency in striking the gold coins of the same weight with the silver, because the proportions of their value would then constantly be the same with the proportion of the metals. The gold crowns would be worth at present 3l. 12s. 6d. the half crowns 1l. 16s. 3d. the gold shillings 14s. and the half 7s. 3d.

It may be asked, how any coined silver has remained in England since its proportion is above that of coined gold. It is answered, that the few weighty shillings which still remain in circulation have marvellously escaped the hands of money-jobbers; and as to the rest, the rubbing and wearing of these pieces have done what the state might have done, it has reduced them to their due proportion with the lightest gold."

"It is recommended—that shillings and supences shall only hereafter be current for twenty years, and all other coins both gold and silver for forty years, or more. For ascertaining which term, there may be marked on the exergue of the coin, the LAST YEAR OF THEIR CURRENCY instead of

the year of their fabrication. This term elapsed or the date effaced, they shall have no more currency whatever; and when offered in payment may be received as bullion at the price of the mint, or refused at the option of the creditor."—

The adoption of these hints in addition to the plan would establish the following table of comparative weights between the gold, silver, and copper coins. Vide table No. 4.

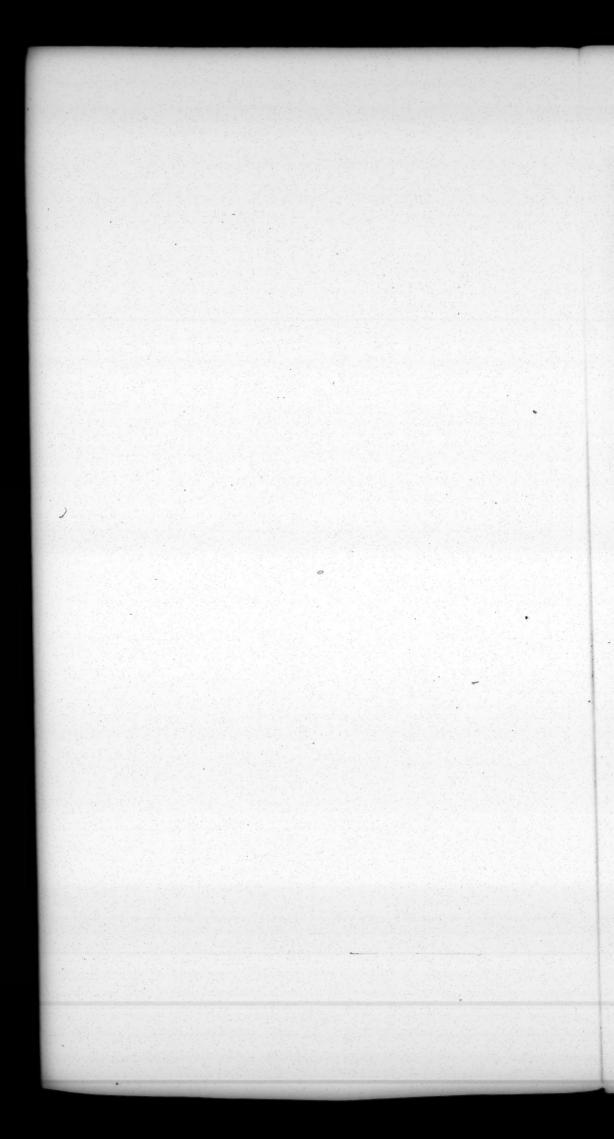
# EXTRACTS FROM REPORTS OF THE HOUSE OF COMMONS, 1758.

"The book called Fleta, which is thought to have been written in the reign of Edward I. and an ancient and very curious manuscript communicated to your Committee, in the possession of Mr. Henry Strachey, containing an account of the estate and expences of the Abbacy de Bello Loco (or Bewley) in Hampshire for the 54th year of Henry III. AD. 1270, mentions a pound which was a fourth Part Heavier than a legal standard pound; and the same is also taken notice of in the Tractatus de Ponderibus, published

## TABLE, No. IV.

Table exhibiting the Quantities of Gold and Silver Coin of the Standard proposed in page 52 and of Copper Coin according to the Table No. 2, contained in the pound Troy and its subdivisions.

	of Gold coin	of Silve	coin	11.47	of Copper coin			
Pound troy would	l. s. d. 43 10 0	l. s.	d.	1.	s.	d.		
contain	43 10 0	3 0	٠	"		٠		
Ounce or Crown piece	3 12 6	0 5	0	0	0	1		
Half ounce or half Crown	1 16 3	0 2		- " - "	.0			
Shilling of 4 drams or 96 grains	0 14 6	0 1	0		of the	nis		



in MR. CAY's edition of the statute book. The legal Pound of 12 ounces is computed to confift of 20 shillings sterling (folidorum sterlingorum) whereas the other pound confifted of twenty-five shillings; not that in those years, nor for many years after, shillings were actually coined; the shilling was then, what a pound sterling has become fince, the denomination of value, not of a coin. The twenty five shillings in Fleta and the Tractatus de Ponderibus, is faid to contain FIFTEEN SUCH ounces as the legal pound did twelve, and confequently the proportion of the MERCHANTS TO THE STANDARD POUND WAS AS FIVE IS TO FOUR.—If this practice had been adhered to, although it was departing from the King's standard, yet the proportion being fixed, and the one pound readily by that means reducible to the other, little confusion would have enfued. But there was in use a multitude of weights and measures differently compounded, and applied to various commodities, as will best appear by the account of them in Fleta Lib. 2. Chap. 12. and another, collected from the aforefaid antient manuscript of the 54th Henry III.

"MR. HARRIS informed your Committee that he thought the pound was, properly speaking, the fittest denomination of
weight: for the hundred refers to the
pound as the ton does to the hundred: and
the pound feemed of a convenient size
for the unit, or standard measure of
weight, because without being too cumbersome, it is big enough to be divided
artificially into many parts. But as there
are two sorts of weight in common use,
troy and avoirdupoise, it may be questioned which of these should be the standard; and this he thought should be the
TROY POUND, FOR THESE REASONS."

"Because it is the weight best known to our law; that which hath been longest in use;—that by which our coins are measured;—that which is best known to the rest of the world,—that to which our learned country-men have refered and compared antient and foreign weights;—the weight which has been subdivided into the smallest parts: On the other hand, the

The pound here mentioned is of 12 ounces only—the troy pound.

AVOIRDUPOISE WEIGHT IS OF DOUBTFUL AUTHORITY, and though unfit to be made a standard, yet the frequent use of it renders it necessary to ascertain and declare how many ounces, penny-weights and grains troy, the pound avoirdupoise ought to weigh."

" Supposing then the troy pound to be the standard, the difficulty is, how to ascertain that weight so as not to deviate from the medium of those weights that are now in common use. The difficulty arises from not having any thing certain to build upon, and yet the DIFFIGUETY SHEWS THAT IT IS HIGH TIME A STAN-DARD should be settled. Hitherto this bufiness seems to have been left to the discretion of the scale-makers, and it seems they take each weight in the pile or nest at the Exchequer as a standard. A doubt then arises, whether the standard troy should be made by fubdividing the whole pile till we come at that weight, or whether the standard should be made by taking an average of feveral weights now called pounds-"

EXTRACT OF ANOTHER REPORT, DATED 6TH APRIL, 1759.

-" This Table is calculated with perfect exactness, and no fraction of a grain occurs till the dram weights."

"And your committee submit, whether when the fraction is so minute, as it is in the parts of a dram, it would not be proper to consider it as a grain and add it to the weight—the difference though it happens in the small weights being so inconsiderable, that it is apprehended the convenience to subjects by avoiding the fraction, will be much greater, than any advantage that can arise by attending to such minuteness."

"And in order to know what might be the effect of abolishing the avoir dupoise weight, as a different standard weight from that mentioned in the said resolution, they examined Mr. Joseph Creswick, Clerk of the Rates, Mr. William Bisset in the Accomptant General's Office, and Mr. Frewin Land Surveyor of the port of London, in relation thereto; and Mr. Joseph Creswick informed your committee, that laying aside the use of the avoir dupoise

<sup>\*</sup> See table No. 3. annexed.

TABLE of Avoirdupoise and Apothecaries' Weight, turn into Standard. Extracted from a Report of the Committee of the House of Commons, appointed in December in the Year 175 dated 6th April, 1759, great Folio Edit. page 9.

voirdupoise.	in the same of the	ındar			Avoirdu					ndard.	
Gt. Wts. lb.		)z. I	wt.	Grs.		4.				Grs.	Prt
		4			Ounces	15		13	13	18	
- 1680 - 1120	2044					14	1.12	12	15	12	
- 1120	1362	8				13		11	17	6	
- 500	681	4	,		3 lb.	12		10	19		
Ids. 9 1008	1226	4	16			11		10			
	1090	1	12			10	1	9	2	12	
7 784 6 672	953	10	8			8	_	8	6	6	
	817	7	4		1 lb.			7 6	0	-0	
5 560	681	4				76		0	7 9	18	
4 448	545		16					5 4 3 2	.9	6	
3 336	408	9	12		1 11	5		4	11	U	
2 224	272	6	8		‡lb.	4		3	13	8	
I I12	136	3 2	8			5 4 3 2		1	14	12	
84	102							1	18	6	
3 84 1 56 1 28 1 14 Pounds 1000	68	1	12		D	1				2	
20	34		16		Drams	15			17		
Bounds - 14	17	0	0			14			15	23	
Founds 1000	1216	8			3.0-	13		7.4		16	
	1095				$\frac{3}{4}$ Oz.	12	1 - 2		13	1	
800		8				11			11	13	
700				4		10			10	9	
600	1				100	8			The state of the		
500		8		1	½ Oz.				9	3	
400		0				7			7 6	23	
300							1		5	16	
200		8 6			Oz.	5		-	4	13	
100		6			4 UZ.	4			2	10	
90 80	109					3	5		3 2	6	
The state of the s	9/	2				1, 2, 5			I	The second second	
70	05	2				]	_			3 20	
50	13	10				7			1	12	3
50	48	8				2	2			13	3
70 60 50 40 30 20	36	6					-	-			-
		10 8 6 4 2 11 8 6 3 1 10 7 5 2			Apoth.	Wt		-		Dwt	. C
10	12	2			Drams		7 -	1-		17 15 12	1
	10	11	8 16 4 12				6		1	- 15	
8	9	8	16				5		1	12	1
7	8	6	4		1 Oz.					- 10	
	7	3	12				4 — 3 — 2 —				1
	6	1			1 Oz.					7 - 5 - 2	
	4	IC	8 16				1		-		1
	3 3	7	16		Scruple	S :	2		-	- 1	
	2 2	5	12				1		-	-	
	1 1	1	1					The same		100000000000000000000000000000000000000	100

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weights entirely, would create great difficulties in collecting the public revenues, on account of the number of fractions \*: but that those difficulties might be got over by employing a number of hands: that he made his estimation of these difficulties in the computation of the duty on the pound of tobacco which he thought the most fimple thing; for fuppofing a pound avoirdupoife to be 7002 grains, and a troy pound -- 5760 ditto, then the rate to be charged for the avoirdupoise pound must be to the rate charged for the troy pound above mentioned as 100 to 86 102, and the difference per cent. will be 17 389. He added, that if the fractions could be reconciled, the same method of computing which is now made use of might be followed exactly with the same ease. In all this, Mr. FREWIN and Mr. BISSET agreed in opinion with Mr. CRESWICK.

It was also observed to your committee, that the practice of delivering out weights, regularly and legally sized, had been hither-

<sup>\*</sup> All of which would be avoided by adopting the old merchants pound of 15 ounces, and making them troy weight according to tables No. I. and II.

to confined to fuch specific weights as were in the possession of the persons authorised to size the same, and that no other weights though parts, multiples, or bearing an exact proportion to the standards, could be legally obtained; and therefore unless care was taken to provide a remedy, the aforesaid resolutions (particularly the 11th resolution) would not only abolish the avoirdupoise weight, but likewise those used by apothecaries, and refered to in all medicinal prescriptions.

But the correspondence of the avoirdupoise weight with the said standard pound, being, according to the aforefaid table, ascertained; and the apothecaries weight being only a different sub-division of the troy pound, with different names annexed to two of those divisions viz: 20 troy grains are called a scruple and 60 grains or three scruples called a dram, your Committee apprehend that all the inconveniencies, imagined likely to arife, from adhering to the faid flandard, will be avoided, and the advantage of uniformity, and prevention of fraud will be obtained, if those who shall be appointed to fize and afcertain weights hereafter are

impowered to ascertain, and deliver out to fuch as require them any weights, being parts, multiples, or bearing any proportion to the faid standard pound; provided that the weight, according to the faid standard, be marked upon each mass so fized and delivered. And by the faid table it will appear, in what manner fuch a power might be executed and operate particularly in respect to the weight called avoirdupoife; for by that table it appears, what standard weight a person would receive who defired a weight equal to the avoirdupoife weight mentioned in the column intitled avoirdupoife, and by using weights fo marked, all difficulties of computation in reducing the avoirdupoise to the standard, and all minute fractions in computing duties, or prices of goods will be avoided.

For instance if the weight called the pound avoirdupoise is necessarily used at the Custom-house, or elsewhere, a weight-according to the standard being one pound two ounces and twelve penny weight and marked as such is equal to it, and therefore this weight being used, the duties may be computed as formerly on the pound avoirdupoise: the denomination

only and not the quantity being really altered. And this will equally hold with all other weights, whether multiples, or parts of the proposed standard. The medicinal weights also will be the same, as those now in use, only marked by the number of grains, and, if desired, distinguished also by the mark used in medical prescriptions.

The materials, of which weights for the future ought to be made, also deserve at-The usual practice in large tention. weights, has been to use lead, or other foft metal for the more eafy adjusting the mass to the standard; though the greatest part of the weight is made of a hard metal, fuch as cast iron; but your Committee (observing that by this practice the weight itself was easily altered, and that the fizing of it could not be any permanent evidence of its exactness, fince lead might be added to it or cut away from it at the will of the owner) examined MR. FREEMAN, a maker of scales and weights, who faid that the foft metals were not absolutely necessary, and that weights of cast iron, might by the help of other hard metals, such as brass, or what is called pot metal, be, he believed, adjusted to the proper standard, and marked so as not to be subject to the frauds, or variations which lead is liable to; and he produced to your Committee patterns of weights made accordingly, and he said that the difference of the prices of weights made in this manner would be as follows.

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Weights Avoirdupois			ast		tterns		1	
141bs	0 2	6	0	4	0	0	0	9
Quarter cwt.	0 4	0	0	6	0	0	1	ó
Half cwt.		0	0	10	0	0	1	6
Hundred	0 14	0	0	18	0	C	2	0

And if the weights were to be made of bell-metal, the price would be one shilling per pound of the metal.

And he said, that in these large weights it was necessary to readjust them frequently, the constant use of them (often in a careless manner) reducing them considerably; and that he is quarterly employed to adjust the weights used at the Custom House.

By this account your Committee obferving that a very great charge would I be laid upon the subjects by the additional price incurred by those hard metals, by which weights must be adjusted, directed Mr. Freeman to make a pattern weight of cast iron, of a form which might be less liable to injury from use, and which might be adjusted, and marked on the handle, so as not to be easily altered by the owner, and yet be nearly the same price with the iron weights now in use.

MR. FREEMAN accordingly produced to your Committee a weight made purfuant to their directions, which is herewith prefented to the House, not as being an exact weight, but as a specimen only of the form in which large weights ought to be made, and of the manner in which they should be marked. The adjusting may always be easy, and also cheap to the subject by the upper piece or bar of filed iron on the handle (a model of a handle for a half-hundred weight is also herewith produced). And both MR. FREEMAN and MR. REED, another scalemaker, agreed that if fuch weights were in common use the price would not be above fixpence each weight more than the price now paid for the common weights, and

and that the re-adjusting would be from fixpence to one shilling per weight, and not more. But after making weights by the directions of the Committee, they were of opinion that the price would not be encreased.

They likewise informed your committee, that the price of the sets of weights following would be viz.

Weights equal to the following Avoirdupoise Weights a Set.

Standard.

Which are the same with the Sets now used at the Exchequer.

The smaller weights, from a pound through all its parts, are most conveniently made of copper, brass or other such hard metal; and should not be made of, or adjusted with lead or other soft metals. And the only guard against fraudulent alterations of such weights, must entirely depend, as the larger weights must also chiefly, upon regulations which shall be made to inforce and preserve uniformity, in the use of what the legislature shall think sit to establish; which falls under the second head of the report, viz.

II. The means proposed as absolutely necessary to inforce and preserve uniformity in the use of weights and measures for the time to come.

The repeated endeavours of the legiflature, ever fine Magna Charta, to compel the use of one weight, and one meafure the original ghout the realm, never having proved effectual, there seems little to be expected from reviving means which experience has shewn to be inadequate; and yet it is very difficult to devise any thing intirely unattempted by former parliaments. But one error in these regulations increased the inconveniences which were intended to be prevented, and probably extended them so far that it became impracticable to put the laws in execution.

That error was, permitting the weights and measurs sent to the several cities, &c. to become standards, from which others were made and dispersed for common use: whereas if those sent from the Exchequer had been preserved only for evidence to cheque and discover deviations from the King's original standards, and provision had been made for supplying the fubjects with weights and measures, fized by those original standards themfelves, all frauds and mistakes in making them would have been avoided, and fuch marks might have been put by the persons authorized to deliver them out to the fubjects, as might have fecured the use of legal weights and measures or rendered the conviction of offenders very eafy.

To the neglect of such a regulation and provision, your Committee on the sullest consideration principally ascribe the great consusion, and wide difference in the several

feveral weights and measures throughout the kingdom; which makes a universal review and reformation absolutely necessary before any regulations for preserving uniformity can be put in execution or have any effect.

From the consideration of the several statutes, and also the four last resolutions of the Committee appointed the last session of Parliament, for the same purposes with the present, and agreed to by the House the 2d June, 1758. viz.

"That it ought to be made penal for any person to make or sell any measure or weight that is not agreeable to the standards.

"That it ought to be made highly penal "for any person to make or sell any mea"fure or weight, that is not agreeable to "the standard.

"That for enforcing uniformity in weights and measures, no person ought to be permitted to make weights or measures, without having sirst obtained proper licence for that purpose upon the payment of a certain sum; and

"That all measures of capacity ought to be marked with the name of the maker, and after a proper axamination be stampt with the initial letters of the name of the person who has examined it."

"RESOLVED: \*—That it is the opinion
"of this Committee that the standard of
"weight ought to be the pound herewith
"delivered, described in this Report, and
"made upon the examination, and review of
"the several present standard troy weights
"therein mentioned; and that the 12th.
"part of the said pound should be an ounce,
"the 20 th. part of such ounce a penny"weight, the 24th. part of such penny"weight, a grain."

"RESOLVED:—That it is the opinion of this Committee that it is necessary, in order effectually to ascertain, and ensorce

"UNIFORM AND CERTAIN STANDARDS OF

"WEIGHTS and measures to be used for the

future; that all statutes relating thereto

should be reduced into one act of

"PARLIAMENT, and all the said statutes now

<sup>\*</sup> See Page 54.

- " in being subsequent to the great charter " repealed."
- "RESOLVED:—That it is the opinion of this Committee, that all other weights fhould be taken from parts multiples, or certain proportions of the said standard pound."
- "Your Committee thought it expedient to procure every information which might enable them to form a just opinion of the most effectual measures, for inforcing uniformity in Weights and Measures to be used for the future."—

(Here follow further investigations and Resolutions: and among others.)

on of this Committee, that all Weights exceeding a pound should be made of Brass, Copper, Bell-metal or Cast-iron: and all those which shall be of cast-iron should be made in the form and with a handle of hammered iron such as the pattern herewith produced, with the mark of the weight cast in the iron: and all weights of a pound or under should be of Gold, Silver, Brass, Copper, or Bell-metal.

